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RURAL
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COLMAN'S RURAL WORLD.

DEVOTED TO AGRICULTURE, HORTICULTURE, HORSES, CATTLE, SHEEP, SWINE, ETC.

Established 1848.

COLMAN'S RURAL WORLD.

NORMAN J. COLMAN, EDITOR.

LEVI CHURCH, ASSISTANT EDITOR.

Published every Wednesday, in Chemical building, corner of Eighth and Olive streets, St. Louis, Mo., at one dollar per year. Eastern office, Chalmers D. Colman, 109 Temple Court, New York City. Advertisers will find the RURAL WORLD the best advertising medium of its class in the United States. Address all letters to COLMAN'S RURAL WORLD, Chemical Building, St. Louis, Mo.

Subscribers must bear in mind that the subscription price of the RURAL WORLD is one dollar a year, and that we do not receive single subscriptions for a less sum, but in our constant effort to enlarge our circulation, we do allow old subscribers to take actually NEW subscribers at the fifty-cent rate, adding a new name with their own for one dollar, and other new names at fifty cents each, but in no case do we accept two OLD subscribers for one dollar. We are willing to make a loss on a new subscriber the first year, believing he will find the RURAL WORLD indispensable ever after. We also send the RURAL WORLD in conjunction with either the twice-a-week St. Louis "Republic" or the twice-a-week "Globe-Democrat" for one dollar and fifty cents a year, and new subscribers may be added at the fifty-cent rate.

Published at this remarkably low price—less than actual cost—all subscribers must see the necessity of our dropping from our subscription list every name as soon as the year paid for expires. Thus if, on the printed slip on each paper you see John Jones Feb. 10, it indicates that the name will drop from the list at the end of February, and if he wishes to continue to receive it, he must renew his subscription. If he would do it a week or two in advance, it would save us the trouble of taking his name off the list and again putting it in type, when he renewed, which frequently causes mistakes.

This is the season to push the good work of getting new subscribers. Show your neighbors a copy of the RURAL WORLD, call their attention to the large amount of fresh, original, entertaining and instructive reading matter contained in each issue; tell them of our large number of intelligent correspondents, and how highly you appreciate its weekly visits and of the low cost at which it can be received. If our readers will spend but a portion of one or two days in enlisting in this work they can easily add more than fifty thousand names within the next 60 days. Who will engage in this work? Will not each reader, male and female, young and old, go into the field at once and see how much he can do to help not only the farmer, but the cause of progressive agriculture?

MORE FARM LITERATURE.

It seems apropos of the season, when farmers have more leisure for reading, to review current farm literature. There are books for the farmer, and we know from experience that the farmer is most desirous of getting good books. When the book appears in the farm home he gets attention, because there is in the rural home respect for books. We regret to say that large sums are often paid for worthless books, or for books that contain information that could be secured in some other work for far less money. We therefore urge our farm readers to familiarize themselves with all farm literature and the writers of such books, a physician knows the authors of his profession, and the state lawyer keeps posted on the legal lights who are known to wisely interpret our laws. The farmer should be as familiar with W. A. Henry, Thomas Shaw, L. H. Bailey and other agricultural writers. Their works should be in your libraries, on your bookshelves and on your parlor tables. The very fact that you possess books on agricultural subjects will stimulate you to do better farming, because no candid man likes to talk what he doesn't practice. Yes, books cost money, but even many times the money thus invested will enable a progressive, thoughtful man to so increase his income and make him so influential in his community that financial benefit will accrue.

The oleomargarine bill came before the House of Representatives at Washington Monday, February 3. The opponents of the measure attempted to filibuster against it at the opening of the session, but were beaten by more than a two-thirds vote. The speakers were Messrs. Henry of Connecticut, Haskins of Vermont and Graf of Illinois in favor of the measure, and Messrs. Wadsworth of New York, Foster of Illinois, Burleson of Texas and Clayton of Alabama in opposition to it.

The opponents of the bill resisted the motion to go into committee of the whole to consider it, and when the measure was announced—62 yeas and 48 nays—Mr. Clayton of Alabama made the point of no quorum. The speaker was able to count only 162 members—not a quorum—whereupon Mr. Underwood of Alabama moved that the House adjourn. Mr. Henry of Connecticut, who was in charge of the bill, made the point that the motion was dilatory, but the speaker overruled the point and the bill was called upon the motion to adjourn. The motion to adjourn was lost, 62 to 162. Another

roll call followed on the motion to go into committee of the whole, Mr. Lacey in the chair.

TEN MILLION DOLLARS LOST.

Missourians are proud of the fact that their state is one of the greatest lead and zinc producing states in the Union, the total annual output of these minerals being valued at nearly \$10,000,000. But note what Prof. Eickes of the Missouri Agricultural College says on page 2 of this issue, relative to what might be obtained by the farmers of Missouri from the cows now in the state, in addition to what is received from them. It is estimated that by properly utilizing the milk from these cows the sum of \$10,000,000 would be received by the farmers of the state annually, in addition to what is now received from that source. Think of \$10,000,000 in value annually that is simply not being saved by the farmers of Missouri because they do not appreciate the importance of the product, or do not understand how this enormous amount can readily be saved. If Prof. Eickes' statement is true—and we do not question its accuracy, for it is in accord with our own observations and estimates—there is certainly a great need for dairy instruction and propaganda in Missouri. We trust the professor and the Agricultural College will be encouraged to go forward with this line of work.

ALFALFA.

The drouth of the last season has forced upon the attention of many farmers the need of growing drouth-resisting crops. Regarding no crop has there been such favorable reports in this respect as on alfalfa. Then the permanent pasture problem is being largely considered, and to this alfalfa answers "Here." The growing of crops that will furnish protein to balance with the corn grown so extensively on our farms demands consideration. And again alfalfa meets the requirement.

In view of these facts, it would seem almost imperative that so valuable a crop should be tested in a small way. In some sections of Missouri alfalfa has been grown with a fair measure of success. If a few roots grow thrifly it would seem safe to presume that by effort a good stand could be secured.

The worst enemy to alfalfa during the first year's growth is weeds. The young plants are tender and are easily killed out by weeds. We noted recently a test given for determining the purity of alfalfa seed. Moisten the fingers slightly and thrust the hand into the bag of seed, and if there are any weed seeds they will adhere to the fingers with the alfalfa, and this may be detected.

The ground must be thoroughly prepared before the seed is sown. Mowing does not injure alfalfa, and the first growth should be mowed and left on the ground. This makes the plant stool and gives it more vitality. The amount of seed required is estimated at from twenty to thirty pounds per acre. If sown with a nurse crop, it is important that the latter crop be cut early for hay. Both oats and barley have been sown as nurse crops.

THE MIDDLE SOUTH.

Editor RURAL WORLD: In the RURAL WORLD of Jan. 8 your Ohio correspondent, Mr. Lyon, points out the advantage of securing homes in this part of the South, where lands are selling for less than their value. I am sorry that he could not spare the time to come down off the Cumberland table land and see some better county than his brother settled in, and where lands costing but little to clear and cultivate are to be had for \$10 to \$12 per acre on easy terms. These lands are within twenty miles of the city of Knoxville, and can be reached by boat, if the farmer wishes to sell hay or grain, but by water the distance is much greater. Knoxville people buy all the hay within reach of the city and much from the West. Last spring I saw loose hay selling from wagons at \$15 to \$18 per ton. This year I have no doubt it will bring the same, as our corn crop was a failure last summer.

This is a well-timbered country; three-fourths of this country is forest land. The valley I am located in is ten miles south of the mountains. No very steep land is in cultivation. The country is well watered by never failing springs and small streams. We have no chills and fever, or cattle diseases, and hog cholera is of the very rarest occurrence. The mean elevation above sea level is about 100 feet.

Farm help costs here about \$18 to \$20 per month; that is, the land owner furnishes house and garden spot, the hand boarding himself at above wages.

PETTIS CO., CENTRAL MO.—Very hard snowstorm on the afternoon of January 25. It lasted till about night and was accompanied by high southeast winds. This, about four inches, on what fell Monday, January 26, which fell on the unfrozen ground, will be of much benefit to wheat. The mercury registered 4 degrees below zero at sunset Sunday, the 26th, and 14 degrees below at sunrise Monday, the 27th, with wind from the northwest. Today, January 27, we and some of our neighbors are hauling manure from the barns to the fields and scattering it. W. D. W.

ST. LOUIS, MO. WEDNESDAY, FEBRUARY 5, 1902.

Volume LV., No. 6.

SOUTHERN ILLINOIS NOTES.

Editor RURAL WORLD: The month of January was one of beautiful winter weather, only moderately cold at any time, and the roads in excellent condition until Saturday, the 26th, when a storm of snow and sleet materialized and the succeeding days were accompanied by cold and periodical storms of more or less severity. A carpet of snow on the ground has been very beneficial, especially the partial thaw, which furnished moisture for the soil and water for the springs and creeks, which were getting low.

It was of no material benefit to wheat and other winter crops, as they were already injured beyond retrieve, and crops of that character will be remarkably short the coming season. Stock of all kinds is doing remarkably well, considering the shortage of feed and the high price at which it is procured. Most farmers have sold nearly all their stock, only keeping what they necessarily must have, consequently cattle, hogs and sheep will be rather scarce during this year.

An epidemic of smallpox has caused considerable sensation. Many towns have been afflicted with the scourge. In some localities the scare has been greater than the reality, caused by the exaggerated stories in circulation in the rural districts environing them, largely curtailing the weekly visits for supplies and mail, and as a consequence reducing trade. Numerous cases were of a mild form, and scarcely recognizable as synonymous with the dread malady, yet there has been a considerable percentage of virulent suffering and death.

The State Board of Health has done excellent work in suppressing the disease and averting a larger prevalence. In some places the local physicians have pronounced it Cuban itch, and not smallpox. In either alternative the suspense and sensation remain the same.

The recent Fayette County Farmers' Institute at Vandalia had a much smaller attendance than should have been. An excellent programme had been formulated and a number of eminent and experienced institute workers from other parts of the state were present to give the farmers the benefit of their knowledge, yet a very few of the farmers were inclined to take advantage of the occasion.

These institutes are particularly instructive and interesting, not only as to programme and speakers, but in an exchange of experiences and results, outside of the prepared programme and proceedings. It is always good for men of any calling to meet together and discuss matters along their lines, and especially is this so in agricultural pursuits, and these institutes afford abundant opportunity to ventilate questions of vital importance to all.

That few of the average farmers take sufficient interest in these meetings to attend and derive the benefit to be obtained is a position that we do not understand.

We do not have to agree with all that is advanced on the various topics discussed, but may gain much useful information applicable to our methods of operation and materially assist us in our own system.

To such I would recommend that they consider the fact that it is not so important what you do through life as how you do it. If you like farming (as most farmers do) go to work and do it well, and any one not content with his work will not meet with the same success that he otherwise would.

THOB. L. TEMPLETON.

J. W. DEADERICK.
Anderson County, Tenn.

NOT SO MUCH WHAT WE DO AS HOW WE DO IT.

Editor RURAL WORLD: Success does not depend so much upon what we do as how we do it. Man's reputation is not made by the occupation he follows, but by the success which he makes of his occupation.

I have just finished reading a story, there is nothing fascinating in the subject matter, but it is well written, every word fits and it is enjoyable reading. The words of one of our writers, "Life's field will yield as you make it," were never more applicable to any occupation than that of farming. Success in farming depends entirely upon how you do it. Though young in years, I have seen men start with a good farm, sell twenty or forty acres at a time, until finally the farm was gone. Then they had to rent or move to town. And the prospects are that they will spend the rest of their lives with little in the house and a day's rations ahead.

On the other hand, we have all seen men start with nothing and soon become owners of a home; acre after acre is added until our man, who does well whatever he does, is known and respected all through the community.

Men choosing an occupation many are inclined to choose that which has a fascinating appearance, or some short-lived attraction. I once knew a young man to get severely struck on working about a locomotive. He secured a position as fireman, but resigned before a week.

There are not a few farmers who seem to think that they are missing their calling; that they should be in line for some high office or some easy job with big pay. They are not content with their work, and any one not content with his work will not meet with the same success that he otherwise would.

To such I would recommend that they consider the fact that it is not so important what you do through life as how you do it. If you like farming (as most farmers do) go to work and do it well, and success will crown your efforts.

THOB. L. TEMPLETON.

WOOD CUTTING.

Editor RURAL WORLD: Mr. Williamson, that wood was cut from three trees, two red beech and one sugar maple, the beeches making three-fourths of the wood. It was cut with a five and one-half foot crosscut saw into eighteen-inch logs.

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As it cut very fast they concluded to time themselves. They cut off the second block in five and one-half minutes and the third in just five minutes by the watch. The log measured about sixteen inches in diameter.

Among wood-cutters a few miles from here four cords of eighteen-inch stove wood, cut, split and corded, is a regular day's work for two men, the wood being red oak and beech. My two oldest boys, 21 and 19, think they can saw six cords in ten hours, but I rather doubt it. I should have stated that we only had to haul the wood about 300 yards.

Brother "Bill," who writes on the same page with Mr. Williamson, is going to raise hogs in Southern Kentucky, just as Mr. W. does in Arkansas, and the sooner hog-growers find that they can make more pounds of hog on rape, vetch, soy beans, cow peas and clover, with a few peanuts mixed in, than they can on corn, corn, corn, the better it will be for them.

If I ever go extensively into hogs I will fence a field into one or two acres and wire the fence with wire and grow the hog right on the ground, where it will be fed. A neighbor goes to Cincinnati today, January 28, to buy 150 bushels of corn at 40 cents a bushel, and it will cost him 71 cents laid down at his door. He could buy bran in the city at 1 cent a pound, and oats fifteen miles north on a good turnpike at 47 cents per bushel. As he is going to feed sixty-five to eighty-pound hogs, the bran and oats are much the cheapest, but corn is his kind of feed, and you can't teach an old dog new tricks.

Hello there, friend Wade! Sorry to hear of loss of stock down in Pettis county, but can't you write a little oftener? You always say something when you write. Tell us more about those chickens, and we want to know about that new farm.

C. D. LYON.

SOUTHERN OHIO.

BEARDLESS SPRING BARLEY FOR S. E. MO.

Editor RURAL WORLD: Please let me know through your columns where I can get beardless spring barley seed. Do you think it a suitable crop for Southeast Missouri? Oats are a very uncertain crop in this section and as I see that the beardless barley is highly recommended, I would like to try it. Please give us any information you have.

M. B. SMITH.

Reynolds County, Mo.

C. D. Lyon is an authority on beardless spring barley. Let us hear from him.

The Exposition sent Mr. Taylor to Paris to gain some desired information, and he has made several visits to Europe and Mexico.

In spite of the fact that the Exposition was a disastrous failure financially, Mr. Taylor's acute business ability is well illustrated by the fact that the concessions produced at least 15 per cent more money to the Exposition in proportion to the paid attendance than did the same department in Chicago, which held the previous record. The horticultural exhibit was one of the pronounced successes of the Exposition, and was largely due



FREDERICK W. TAYLOR, CHIEF OF AGRICULTURE AND ACTING CHIEF OF HORTICULTURE OF THE ST. LOUIS WORLD'S FAIR.

The recently appointed Chief of the Department of Agriculture and Acting Chief of the Department of Horticulture was born in Nebraska in 1860, and, though widely travelled and having spent two and a half years in the Pan-American Exposition at Buffalo, is essentially and always a typical Western man, with the energy and push which that term implies. His father, William Taylor, was a well-known nurseryman in Western Iowa, and was one of the organizers, about twenty-five years ago, and first president of the Western Iowa Horticultural Society, one of the strongest organizations of the kind in America.

After serving a thorough apprenticeship with his father, Mr. Taylor secured employment in one of the largest nurseries in the country to broaden horticultural knowledge, and almost immediately upon reaching his majority embarked in business for himself.

For several years he was engaged in the nursery business, at the same time managing a large stock farm. In 1887 Mr. Taylor was, without any knowledge on his part that he was being considered, offered the Professorship of Horticulture at the University of Nebraska. This position he accepted and held for several years, at the same time carrying the organization and management of the Farmers' Institutes of the state and of the extension of the university.

He had a very close relation to farming throughout all these years, owning and managing several hundred acres of land in Illinois and Nebraska, and keeping in close touch with the advancement and use of improved methods and appliances.

Take the important cereal, corn, as an illustration. It is proposed to bring together at one place samples of every known variety of corn, illustrations and examples of every known use of the plant or fruit, including the different food forms, glucose, alcohol, stock foods, the use of the pith and other little or undesirable portions of the stalk, all to be shown in such a way as to graphically portray the multitude of uses to which maize is put.

Bring all this together should produce a most impressive object lesson.

It is proposed to treat in substantially the same way wheat, tobacco, cotton, the potato, the apple and such other agricultural staples as can be shown with sufficient advantage to make profitable the time and expense necessary to produce such exhibits.

If the various states which must supply the great majority of the distinctly agricultural exhibits will carefully select capable and experienced men to superintend their portions of the display, and at the same time work in harmony with what their neighbors may be doing, it seems sure that the Louisiana Purchase Exposition will entirely outdo anything ever attempted in that line. And what is said regarding pure agriculture applies equally to the divisions in which will be shown agricultural implements, dairy products, grains, grasses, etc., in the installation, to the exclusion, so far as possible, of mere showy furniture and carpentry work. The result was astonishing and most satisfactory, as showing the fine results easily attained by the artistic use of the crude materials mentioned.

At the Trans-Mississippi Exposition opened in Omaha in 1898 Mr. Taylor was appointed

The Dairy

DAIRY CONVENTION DATES.

Michigan Dairymen's Association, Lansing, Feb. 4-6, 1902.
Ohio Dairy Association, Columbus, Feb. 4-7, 1902.

Wisconsin Dairymen's Association, Milwaukee, Feb. 12-15, 1902. G. W. Burdick, Secretary, Fort Atkinson, Wis.

Kansas State Dairy Association, at Manhattan, Kan., March 4, 5, 6, 7, 1902.

A. Boren, Secretary, 505 Polk street, Topeka, Kan.

OLEOMARGARINE REPORTS.

Majority Summarises the Injury Done to the Dairy Interests.

Washington, Jan. 29.—The majority and minority reports on the anti-oleomargarine bill were filed in the House to-day. The majority report is concurred in by all the members of the Agricultural Committee except Messrs. Wadsworth of New York, Connell of Pennsylvania, Scott of Kansas, Williams of Mississippi and Allen of Kentucky. It summarises the extent of the injury claimed to be done to the butter and dairy interests by the sale of manufactured products colored to imitate the genuine article. The minority urges a substitute, which they say is designed not to prevent the manufacture or sale of oleomargarine, but to prevent it from being fraudulently sold for butter.

Representative Sherman of New York to-day made a favorable report from the House committee on Commerce to prevent the false branding or marking of food and dairy products by providing heavy penalties. The report cites cheese and maple syrup as articles much subject to misbranding.

CREAMERY BUTTER MAKERS.

Three members of the executive board of the National Buttermakers' Association met in Lincoln recently to transact business in connection with the association.

Besides discussing the matter of location, the secretary was authorised to send out notices inaugurating the educational butter test which shall be a national competition commencing with May of this year. The plan has been discussed a good deal in dairy papers and contemplated that each person entering for the prize shall send each month a tub of butter to the regularly appointed officials of the association, who shall have it scored and sold. The person who has the best average for the several months during which the contest is to continue will receive first honors. No prize has been announced, it being understood that the honor of scoring first in this competition will be sufficient reward.

Three members of the committee, President George Haskell, Secretary E. Sudendorf of Elgin, Ill., and W. K. Boardman of Nevada, Ia., were in attendance. It was decided best to wait till the five members of the committee were together before deciding on the location of the October convention. Kansas City, Lincoln and Milwaukee are being considered as places for the meeting.

BUCKEYE DAIRY FARM.

Herd Report For 1901.

Editor RURAL WORLD: A year ago we sent you a report of the returns of our herd of cows for 1900, which showed an average of \$51 per cow for butter alone, with 16-head in the herd.

From January 1, 1901, to January 1, 1902, our herd consisted of 20 cows, of which eight were heifers with their first calves, the others being mature cows. From this herd we made during the year 5,271 pounds of butter, for which we received in cash \$1,668.32, an average per cow of \$65.40 for the year, as against \$51 per head last year, which, when we consider the many disadvantages dairymen had to labor under the past year of heat, drought and short pasture, is, we think, doing fairly well, although our receipts are under what we aimed at when we started in at the beginning of the year; nor are the returns up to what our herd is capable of doing with a fair and even chance.

I give only the amount received for butter alone. Our cows have to their credit \$6,000 pounds of skim milk per head, and a calf, besides the butter, but there are so many ways of figuring and estimating these by-products that I leave the readers to draw their own conclusions as to their value—not because I have no idea as to their worth, but rather that no one may be misled by my report.

In one of my farm papers this week I read a report of a herd that was misleading and calculated to discourage those whose returns seemed small in comparison. And right along this line, I think many well-meaning dairy writers unintentionally make mistakes by continually parading their herds, their fine or costly barns, machinery, etc., and putting them so far above and beyond what the average mortal has, because it breeds dissatisfaction in those who still are on the lower round of the ladder. This particular writer had figured out a return of over \$100 per cow in one year. In the first place, he had assumed that his cows had given milk the entire 12 months of the year. Then he gave them credit for skim milk at 20 cents per 100 pounds, and \$5 for one calf. This is not saying that there are no herds that will yield \$100 a year per cow without doctoring returns or placing too large estimates on the by-products; but I think it best to always follow the advice of Samantha Allen and

pursue what she calls a medium course. I feel quite sure that many farmers have been led into making mistakes by reading glowing accounts of the amount of money that can be made in this or that line of farming and then rushing headlong into something for which they have no qualifications.

For the farmer with a small farm, say from 50 to 100 acres, dairying offers, I think, all things considered, greater inducements in sure and liberal returns than any other branch of farming; but it just as surely calls for a higher order of intelligence, and the man who thinks of making a success without using brains with his work will make a mistake in going into the business. I have always been a close observer of men and their methods, and have never yet seen a man go into the dairy business and fail to make a success if he started out with the determination to do the best he knew how or could learn how; not only what he could learn from his own experience, but what he could learn and gain from the experience of other men. The means of acquiring a knowledge of dairying, including the breeding, feeding and caring for dairy stock, is within the reach of any aspiring man in the way of agricultural schools in almost every state, which at a small cost will fit men so as to be good any, and if he is inferior it is not because fed skim milk, but because it was not in the proper manner.

C. H. ECKLES,
Prof. Dairy Husbandry, Mo. Agricultural College,
Columbia, Mo.

THE KANSAS DAIRY MEETING.

Will Be Held at Manhattan, Kan., March 4 to 7, 1902.

Secretary T. A. Boren of the Kansas State Dairy Association, writes the RURAL WORLD that arrangements for the fifteenth annual meeting of the Kansas State Dairy Association, to be held at Manhattan, Kan., March 4 to 7, are progressing rapidly. The committee announces that what is likely to be the largest meeting of Kansas dairymen at the state ever known will assemble at Manhattan on the date above.

The Kansas Agricultural College has more to show at this time than ever before in its history. It has five breeds of pure breed dairy animals and two breeds of general purpose animals. Each breed will be of interest to every farmer who visits the association and is interested in what is going on.

The school for judging stock will open at that time and all members of the Kansas State Dairy Association will be eligible to entrance in its classes. Each afternoon of the week March 3 to 8 will be devoted to stock judging. The afternoons of March 4 to 7, inclusive, will be devoted to the sessions of the State Dairy Association.

The one-fare rate has been granted by all railroad companies from points in Kansas to Manhattan by the Agricultural College and Dairy meetings at this time. The program as arranged so far indicates that it will be the best ever presented to an audience of Kansas dairymen.

Prof. G. L. McKay of Ames, Iowa, will score the butter and cheese and will lecture on the subject, "Butter for European Markets." Prof. McKay is recognized champion butter maker of the United States, and what he will have to say to Kansas butter makers no butter maker can afford to miss for the expense entailed in coming to this meeting. Prof. McKay has just returned from a trip to Europe, where he has investigated the European dairy and butter making, and is thoroughly posted as to what the Kansas butter maker must do before his butter will rank with the products of Denmark.

My cows are in a warm basement with clean, roomy mangers. I put the fodder down through a chute, and not a particle of it is wasted. They eat it practically all. I pull the nubbins off for my horses; so, as I said before, they get nothing but the fodder. My milk cows are giving a little over an average of three pounds of butter a week per cow. Heretofore with grain and bran and shredded fodder they yielded about five pounds. If I had an abundance of fodder I could easily make them turn out four pounds.

We get 30 cents per pound for butter.

The only proper way to confine cows is with their heads in stanchions. They occupy less room and are much better contented, because they are not afraid of each other, and each cow gets what was intended for her.

Had I allowed my fodder to remain in the shock with the weather bleaching it and the rats and mice working in it, and hauled it up and fed it outdoors under the cows' feet, as is usually done, I would not have derived half the benefit from the crop that I am now. The way I am fixed for this winter I am getting all there is in it. There is, however, more nutrient in corn fodder this year, as I think, than usual. It is covered with blades from the ground up, and we had to pull the nubbins off for my horses; so, as I said before, they get nothing but the fodder. My milk cows are giving a little over an average of three pounds of butter a week per cow. Heretofore with grain and bran and shredded fodder they yielded about five pounds. If I had an abundance of fodder I could easily make them turn out four pounds.

Another farmer states that one-fourth of an acre of Pencilaria will furnish a cow with all the green food needed throughout the summer and fall, and that another quarter of an acre if cut several times during the season will make all the hay or fodder needed for the entire winter and spring until the green crop is ready for use the succeeding season. What do you think of that, feeding a cow one year from the product of half an acre of land?

Knowing that many of our readers would be interested in this new plant, we have arranged with the Iowa Seed Co. of Des Moines, Iowa, to send a sample, sufficient to plant a row 100 feet long, free to any of our readers who ask them for it, providing they mention the paper in their request. It costs you nothing to try it, and as the supply is limited, it will pay you to write to them without delay.

H. D. Watson of Kearney, Neb., the largest alfalfa grower in the world, will talk on the subject of "Growing and Marketing Alfalfa." Mr. Watson this year has 7,000 tons of alfalfa to sell, and in addition he has had a sufficiency to feed 400 head of milch cows and a big lot of stock cattle. He owns 40 milking cows and these animals are stabled in the largest barn in the world. The silos to this barn holds 2,000 tons of ensilage. He can give a dairy man of any country pointers on feeding for milk.

Major Henry E. Alvord, Chief of Dairy Division, Bureau of Animal Industry, will deliver a lecture on "European Dairying." This lecture will be illustrated and will be valuable and interesting. Mr. Alvord is doing wonderful work for United States dairy interests in pushing to the front American butter in the European markets.

J. E. Nisley of Topeka, Kansas, who has returned from a trip around the world, will make an interesting talk to Kansas butter-makers and dairy farmers. Mr. Nisley is a man of wide experience, and has been president and secretary of the State Dairy Association. He has always shown a deep interest in promoting the welfare. His lecture will be one of the most instructive features of the program.

E. B. Cowgill, editor of the Kansas Farmer, Topeka, will discuss the "Relative Value of Feeds." Mr. Cowgill has figured the question of the feed value to a very fine point, and has a most interesting lecture on the subject. It has been given in other states, and before other audiences, but never before a Kansas audience.

Foods that are good for the blood are also good for milk production.

Cost Missouri Farmers \$10,000,000 a Year.

Editor RURAL WORLD: The high price that our test farm lands have reached recently is leading many farmers to do considerable thinking. A good many are asking themselves if they can afford to keep a cow on land worth \$60, \$50 or \$40 per acre for the chance of a calf worth \$15 or \$20 in the fall. I believe the more they figure on it the more certain will be the decision that with ordinary grade cows, under the conditions given, the profit is small, if any at all can be shown. The fact is, the conditions are not the same now as some years ago, and while at that time keeping such cows for raising calves alone was a very profitable business, now only those having the most favorable conditions can afford to do so. The man who keeps cows from this time on will have to have those capable of producing very valuable calves or get some return from the cow besides the calf if he expects to get a fair return for his investment and for his labor and feed.

The average grade cow will give milk enough if sold at the usual factory price to pay for her feed, the labor of caring for her and interest on investment, leaving the calf for profit. This is shown by the reports filed with the Secretary of the Missouri Board of Agriculture from 30 creameries, which reported an average of \$29.32 per year paid for the milk of each cow. This does not cover, of course, a large amount of milk used by the owner of the cow. The reports of about one thousand Iowa creameries show about the same return per cow there. This return should be and can be almost doubled by proper selection, care and feeding, and is realized in many herds. Suppose the returns per cow are only \$30 per year for milk, her calf, which can be raised on the skim milk, will increase the returns to, say, \$45 for the year. The same cow raising her calf gives a return of only \$15 or \$20.

Secretary Ellis estimates that this state has nearly half a million cows kept for raising calves primarily. Each of these calves consumes about 140 pounds of butter fat which was worth this past year \$20 cents per pound on an average at the

butter factories, or \$3 for the entire amount. This butter fat, by no means the most valuable part of milk for the calf, can easily be replaced with corn meal or flaxseed jelly, which will supply the same elements at a cost of a little over a cent per pound. The cows at present in Missouri could without doubt be made to return \$10,000,000 more per year under present conditions by utilizing the high-priced butter for other purposes than calf feed. This involves the raising of the calf on skim milk and one-half over a cent per pound. The cows at present in Missouri could without doubt be made to return \$10,000,000 more per year under present conditions by utilizing the high-priced butter for other purposes than calf feed. This involves the raising of the calf on skim milk and one-half over a cent per pound. 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Live Stock

DATE CLAIMS FOR LIVE STOCK SALES.

Feb. 11-12, 1902.—Redhead Anisty, Boyles and others, at South Omaha, Neb. Herford cattle.
March 6-7-1. M. Forbes & Son, Henry, Ill.; J. F. Prather, Williamsburg, Ill.; H. E. Prather & Son, Springfield, Ill.; C. H. Dustin & Son, Summer Hill, Ill.; T. J. Wornall, Mays, Mo., and others, at Chicago, Ill. Shorthorns.
March 11-W. P. Nichols, West Liberty, Iowa. Shorthorns.
June 18-C. E. McLane, Danville, Ind., at Indianapolis. Double Standard Polled Burghams.
The "National Hereford Exchange" under management of T. F. B. Sotham, as follows:

March 25-26-Chicago.
April 25-26-Kansas City.
May 25-26-Omaha.
June 24-25-Chicago.

ABERDEEN ANGUS CATTLE.

April 10-11—Combination sale, W. C. McGavock, mgr., Kansas City.
June 10-11—Combination sale, W. C. McGavock, mgr., Chicago.

NATIONAL SHORTHORN SHOWS AND SALES.

Feb. 18-At Chicago, Ill., George Allen, Allerton, Ill.
March 1 and 13-At Trenton, Mo., combination sale, H. J. Hughes, secretary.

March 19-At Kansas City; W. H. Nelson, dispersion sale.

March 25-At Kansas City; B. H. and H. T. Green, Panhandle, Texas.

March 25-At Vandalia, Mo., Robinson Bros. & Wright.

May 8-At Columbus, Mo., Boone County Shorthorn Breeders' Association.

May 14-At Kansas City, Mo.; W. T. and H. R. Clay, Plattsmouth, Mo.

Feb. 14, 1902—Combination sale Berkshires, Kansas City, Mo., June 1, King, Marshall, Mo.; J. T. Pollard, Fulton, Mo.; Harris & McMahan, LaMire, Mo.; Charles F. Mills, Clark, Springfield, Ill.; Oct. 22, 1902—Geo. W. Jessup, Rockville, Ind.; Charles F. Mills, Clark, Springfield, Ill.

Dec. 3, 1902—Combination sale Berkshires, Manager A. J. Loveloy, Roscoe, Ill.; Clerk, Charles F. Mills, Springfield, Ill.; J. R. Young, Poland-China sale at Richards, Mo., Feb. 26.

Winn & Masters, Poland-China sale at Kansas City, Mo., Feb. 25.

June 1, King and Harris & McMahan, Berkshire sale, Kansas City, Mo., Feb. 25.

National Berkshires sale, Kansas City, Mo., Feb. 14.

A GREAT EVENT COMING.

In which Hereford Breeders Will Be Interested.

When such representative Hereford breeders as Scott & March, C. A. Stannard, Walter B. Waddell, Frank Rockefeller, Gudgel & Simpson, O. Harris, Steward & Hutchison and Mrs. C. S. Cross announced that on February 25, 26 and 27 they will sell at Kansas City the best 200 head of Hereford cattle to be sold during the year, everyone familiar with Hereford events will acknowledge their ability to "deliver the goods." From their herd, which number jointly over 2,500 head of registered cattle, have come more prize winners, more foundation stock for registered breeding herds and more bulls to head pure-bred herds than from any other equal number of herds in existence today. They are now offering 200 head that will meet any of these three requirements. All of these contributors, with the exception of Mrs. Cross and Mr. Rockefeller, have participated in numerous sales the past season, but their consignments to this sale have not suffered on the account. Since the 25th of last February they have been planning for this sale, and many of the plums of their herds were reserved long ago for this very event. Each contributor has but one statement to make concerning his offering, and that is: "It is the very best lot of cattle I have ever sold or can sell. These breeders are going before the public with the best of their breeding, and in one particular this sale differs somewhat from others of this season's combination sales, and that is in the fact that with but a very few exceptions the entire lot of 200 head were bred by the consignors. Each participant who had out a show herd last fall has some of them listed for this sale. This is the yearly event upon which each contributor in staking his reputation as a breeder, and anyone who knows any of these parties knows that they will eclipse their past achievements.

We will speak more in detail of the offerings from the different herds in later issues.

Our readers who are interested in registered Shorthorn cattle, Poland-China hogs and Plymouth Rock chickens, should communicate with V. D. Dierker, St. Charles, Mo., when wanting first-class stock.

LOSS OF LIVE STOCK.—The recent heavy fall of sleek is causing great loss among cattle wintering on the ranges in the southeastern part of Missouri. The forage was greatly depleted by the forest fires last summer, and what remains is covered by a heavy coating of ice. An additional loss is suffered by falling trees and branches. A press dispatch from Poplar Bluff, dated January 21, stated that many of the cattle imprisoned in the frozen forests were dying of starvation.

Cows
Made to
Breed

Inject with Hood Farm Breeding Powder when they fail to breed, do not clean, are irregular; also after abortion. Of great value to breeders and stock owners. Dollar size by mail, \$1.15; large size four times more, to any rail road express point in U.S. \$2.75 C.I. Hood & Co., Lowell, Mass.

THE WESTERN RANGE PROBLEM.

In the RURAL WORLD of January 29 we published the preamble and resolution adopted by the Nebraska Live Stock Breeders' Association at their late meeting, urging Congress to enact a bill which should provide for the leasing of public lands for stock-grazing purposes. A bill, H. R. 7,22, introduced by Mr. Bowersock, is now before Congress.

Mr. Hugh T. McIntosh, editor of the Nebraska Farmer, says in a letter to us: "It is of the highest importance that the government should act on this subject. The present state of war existing on the range, because of irreconcilable differences between sheep and cattle men, makes it imperative that some sort of security should be given those who desire to become permanent residents or users of the range."

"I do not assume to say that a lease system is best, and possibly you would not care to go on record as favoring any particular system. However, Congress should take some course which will define rights on the range and make the range productive of revenue to the nation. This is a burning question in the West, and should be of deep concern to all the people."

Speaking further of the "state of war," Mr. McIntosh says:

"In the evolution of the live stock business the sheep industry has to be reckoned with. Here is an animal that can graze closer than a steer; it is omnivorous, eating sage brush and grasses as readily as grass, and in winter subsisting on snow for water. Possessing these advantages, the sheep is master of the range situation. He waxes fat on the high plains in winter, and makes a desert along the mountain streams in summer. What he cannot eat his feet destroy, for the bunch grass of the mountain dies under the trampling of sheep. For barbed wire he cares not, and your cattle man—his home and interests are wiped out by the sheep man. What is more, the sheep syndicate has sprung into existence. The flocks of Chicago or San Francisco corporations, with 50,000 to 500,000 sheep, in charge of peons and Indian herders, traverse the mountain states, leaving a wilderness in their wake. These sheep corporations own no homes, they pay no taxes, they have no interest to further but the sustenance of their flocks. Against this invasion the established home-making cattle man has no defense except his Winchester."

"This state of war now existing in the range country between sheep and cattle interests, and for which the existing public law is responsible, reflects most discreditably on American statesmanship. Under this intolerable condition sixteen homicides were reported in Colorado alone between November 1, 1900, and March 1, 1901. This is the moral aspect of the situation. A people which are self-respecting will not tolerate a condition which produces such results. A home-loving people cannot but sympathize with and desire to further the interest of the cattlemen who in this disgraceful 'war of the range' offers his life in an unequal contest for possession of the only resource available for maintaining a family in his isolated mountain home, as against the nomadic hired servant of a foreign sheep corporation. In this contest the cattlemen have been driven out of the mountain states, except in favored localities. The war is being waged bitterly in Colorado, the Dakotas and in the Pacific coast states, and there are signs of sheep invasion in Nebraska, Kansas and the Texas panhandle.

"But your sheep corporations command enormous capital. For many years the American Wool Growers' Association has supported a strong "lobby" contingent in Washington. It has dictated tariffs in past years, and now decrees that all fences on the public lands shall come down—illegal fences, to be sure, but a species of license out of which has come courtesy between neighbors and thrift where chance held sway."

THE CRITERION SALE

Averaged \$341.50 on 134 Herefords at Kansas City Last Week.

The best wine, so to speak, in the Criterion sale of Hereford cattle was saved until the last. Sotham's magnificent young bull, Good Cross 120180, shattered the records of all best breeds for yearlings by selling at \$3,995. This animal was calved Dec. 1, 1900, and is a blue-blooded individual if there is such a thing as blue blood. His sire was Improver 94020, one of Sotham's herd bulls and his dam. The Grove Maid 22d 2675. Sotham says this is the best blood of any Hereford animal in America. It would seem also that several other breeders entertained the same notion, for several of them wanted Good Cross for their own herds. The lucky bidder, however, was the Wabash Stock Farm Co., of Wabash, Ind. This company consists of J. W. Godman of Wabash, A. R. Campbell, Independence, Iowa; F. L. Studebaker, Warren, Ind., and Clem Graves of Bunker Hill. It is said that the company brought along the "Sword of Bunker Hill" in preparation for the battle royal.

The only yearling animal that has sold in the same class with Good Cross was March 18th, which brought \$3,500 at Chicago at the close of last year.

The connoisseurs to the Criterion, which closed last evening, were all greatly pleased with the outcome of the sale. The demand was good, and although 134 head were sold, bidding was prompt up to the last. The total amount realized from the sale was \$2,855, making a general average of \$341.60. Females outside the males by \$80.51. There were 118 females, which brought \$42,125, an average of \$372.75. The grand summary is as follows:

118 cows brought \$42,125.00
Average 372.75
134 head brought \$2,855.00
General average \$341.60

Below is given a statement of the individual averages of the breeders contributing to the sale. Clem Graves of Bunker Hill, Ind., leads the list with an average of \$1,077.50 for the eight head he contributed to the event. Last year Mr. Graves made an average of \$564 on 19 head, which was considered a sensational figure. While some of the averages made by the Western breeders do not show up big, it must be taken into consideration that their stock has not been as widely advertised as was Mr. Graves, and again, many of their animals were young things with no

reputation made for themselves, while Mr. Graves' cattle were all matured cows and most of them with prizes at their heads.

Taking the entire lot of cattle into consideration the averages made by the respective breeders were all eminently satisfactory. The paucity of sensational priced animals is not a feature to be regretted in a sale, however, as offering of truly representative breeding cattle, such as are within the means of the farmer buyers throughout the country, is even more to be desired by the friends of the breed. The individual averages of the breeders were:

T. F. B. Sotham, 27 cows at \$266.55 and 26 bulls at \$468.5, a total of 53 head selling for an aggregate of \$19,600, or an average of \$364.31.

Egger Hereford Cattle Co., 18 cows at \$214.44 and 22 bulls at \$333.5, a total of 40 head for an aggregate of \$8,965, or an average of \$224.13.

C. B. Smith, 8 cows at \$372.50, and two bulls at \$377.50, a total of 10 head for an aggregate of \$1,065, or an average of \$26.50.

J. C. Adams, 11 cows at \$260.50, and one bull for \$600, a total of 12 head for an aggregate of \$1,160, or an average of \$96.67.

F. A. Nave, 6 cows at \$374.23 and one bull at \$350, a total of 10 head at an average of \$333.50.

P. H. Godman, 5 cows at \$350 and 4 bulls at \$700, a total of 9 head for an aggregate of \$5,250, or an average of \$583.67.

Clem Graves, 8 cows for an aggregate of \$3,620, or an average of \$452.50.

Jas. Paul, 4 cows at \$325.50 and one bull at \$300, a total of five head for an aggregate of \$1,210, or an average of \$242.00.

B. E. Keyl, 4 cows for an aggregate of \$350, or an average of \$87.50.

Carothers Bros., one bull for \$450.

F. L. Studebaker, one cow at \$300.

J. B. Fernow one cow at \$300.

D. W. Black, 5 bulls for an aggregate of \$1,145, or an average of \$229.

S. H. Godman, 5 cows at \$350 and 4 bulls at \$700, a total of 9 head for an aggregate of \$5,250, or an average of \$583.67.

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Horseman



Boston's Grand Circuit meeting will be held at Readville Aug. 12-22. Providence follows Readville and Hartford will take its regular date, which gives Labor Day. Detroit will start a circuit July 21. For its Grand Circuit meeting Readville will open practically the same early closing events as a year ago. This means the Massachusetts \$16,000 purse will be for 2½ trotters and that the \$5,000 prize for pacers goes to those eligible to the 2½ class.

The record for the Russian Orloff trotter is now 2:14½ and with American training methods and American drivers it looks as if the time is not far distant when the Russian breed will compete with the American. It is well to note, however, that Goldsmith Maid made her champion record of 2:14½ Sept. 2, 1874, and it has taken the American breeder twenty-five years to get from 2:14 to 2:20½, and with a start of a quarter of a century the Russian trotter is not liable to catch up in the next generation.

Those wanting to buy horses should not overlook the advertisement of the combination sale of high class saddle, harness and coach horses in this issue of the RURAL WORLD. The sale will take place Wednesday and Thursday, Feb. 19-20. One hundred head will be offered for sale, selected from the best breeders in Boone, Audrain, Callaway, Randolph and Monroe counties. Hundreds of horsemen will attend the sale, and intending buyers should be present. Secure a catalogue at once by writing to J. K. Pool, Centralia, Mo.

Columbia seems to be the only town in the state that has fixed a date for its fair and opened stakes. The stakes are \$1,000 for 2½ trotters, \$600 for 2½ pacers, \$400 for 2½ pacers, \$1,000 for 2½ trotters, \$400 for 2½ pacers, \$1,000 for 2½ pacers. August 6, 7, 8 and 9 are the days chosen for the fair. What fairs will get in with Columbia? A short haul circuit should be formed. There are enough Northeastern Missouri towns to form a good circuit, if they will only hold a meeting and agree upon a circuit. It now looks as if Columbia will have to unite with the Southwestern Missouri circuit.

A recent writer says that as the result of experiments he has made under careful timing he finds that the greyhound is the fastest of all four-footed animals. When going at full gallop it can cover twenty yards a second, or about a mile in a minute and twenty-eight seconds—a speed that comes very near that of a carrier pigeon. There are few thoroughbred horses that can exceed nineteen yards a second. Greyhounds have been known to better than four yards. Foxhounds have a record of four miles in six and a half minutes, or nearly eighteen yards a second. This speed is to some extent an inherited gift, as wolves can run at a rate of a mile in three minutes. Nansen says that Siberian dogs can run forty miles on ice in five hours.

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"Crescens has now been shown on each coast of this continent, and those whose good fortune it has been to know him have seen a truly great horse, the greatest trotter that ever lived, by two standards, the fastest and the greatest," says a writer in the Kentucky Stock Farm. "Whether or not this grand horse is ever again seen before the racing public will have firmly established his right to the title of king of trotters. There is none other like him; he is a class by himself, and when at his best could out-trot and out-stay and out-repeat any trotter that has ever been seen, a truly grand race horse, honest as he was game, as fleet as the wind and as steady as the piston rod of an engine; and while lacking in the beauty of quality he possessed the fascination which is found in great strength. He is a giant among pugnaces, a Hercules with the wings of Mercury."

One of the greatest of the younger class of stallions now doing service is Cedián, a son of Almoni, a stable companion of Grattan, 2½, and a son of Almoni at the Grattan Stock Farm, Prairie View, Ill. The sire of Cedián was the great Electorion; his dam the successful broodmare, Ceci, by the greatest of brood sires, Gen. Benton, his granddam being Cuba (dam of Cubic, 2:19½), by Imra Australian. The Electorion—Gen. Benton can be said to be a most successful one, and as a sire of early and extreme speed Cedián stands at the top of the head. His son, Endow, 2:14½, was the sensational 3-year-old trotter of 1899, winning all his races, trotting every heat but one in better than 2:20, and retiring with the world's record of 2:14½ for a 3-year-old gelding. At

other son, Battisign, won two heats in the M. & M. \$10,000 stake in 1900, and it was conceded that he could not lose the race. Unfortunately, he cut a tendon and had to be drawn. In 1901 he was represented on the turf by the great 2-year-old filly, Grace Eldred, 2:17, besides Benign, 2:19½, Joe Sibley, 2:18½, and Emily O., 2:19½. Others will be campaigned this year, and they will undoubtedly add to the reputation of this good son of Electorion as a sire of fast and level-headed trotters.

BLUE BULL NOTES.

By L. E. Clement.

S. F. Schurman of Terrell, Texas, has a filly almost any one would be proud of, sired by Preceptor, son of Nutwood, dam Nelly Hancock, by General Hancock, second dam Nelly Hanson, dam of Dandy Sprague, 2:15, by Blue Bull 70.

Preceptor 6801 is one of the best-bred sons of Nutwood, and unites the blood of Hambletonian through Alexander's Abdallah and his own daughter, Arties, with the best blood of Woodford Mambrino. In addition to this we have in the filly the blood of George Wilkes and Blue Bull.

Evans of Ravenna, Mo., has a coming 3-year-old stallion by Vasco, 10,300, sire of thirteen trotters and three pacers. As a 2-year-old this fellow trotted a mile in 2:28, and showed extreme speed. First dam Beware by Elly Wilkes, 2:29½; second dam Lady King by Mambrino King; third dam by Peavine, fourth dam by Kavanaugh's Gray Eagle, fifth dam by Trany. This should make a good horse.

J. M. Brown of Casey, Ill., has Cooper H., son of Blue Bull, second dam a Copperbottom mare, registered in the Pacing Register started by Parsons of Cleveland, O., and numbered 26.

W. M. Gray of Webb City, Mo., owns a mare by Goodwood 4106, dam by Aladain, son of Hambletonian. She will probably be bred to Tennessee Wilkes, Attorney F. H. McCullough of Edina, Knox county, Mo., brought Reno's Baby, the horse that trotted to a double record the same week (2:25½ trotting, 2:24½ pacing) to Missouri. Mr. McCullough drove him to a peaking record of 2:14 at Dallas, Tex. He usually keeps a good one on hand. Judging from pedigree, he has a yearling now as good as he ever owned or drove.

Nora Totwood by Totwood, 2:27½, by Guy Wilkes; Totwood's dam the great broad mare, Tot, sold by D. L. Bourne to Glenview Stock Farm, in Kentucky, and repurchased by him at the dispersal sale; dam Nora Neal, by Nihilist, out of Chiswell, by Lyle Wilkes out of Chum, by Duke's Norman. This is a Bourne pedigree throughout. There are several great brood mares in the list and plenty of the blood of George Wilkes, Alexander's Abdallah and Dictator in the pedigree. She should make either a race mare or a first-class brood mare.

You Bet, Chancy Sumner's son of McKinney, will be entered through the Grand Circuit in the 2:12 class. Sumner will do his own driving. Mr. Sumner has been engaged to start the horses at the first meeting at Knell's Park.

Dr. F. J. Willets of Webb City has one of the best fillies I have seen. She is a bay with little or no white. Sired by Kankakee, dam Leoline, dam of Big Timber (2:14½) and Little Timber (2:21½). The doctor says he has nothing now that can throw the little miss of her feet when sped by the side of a horse in cart or buggy.

Leoline lost a colt this winter by Anteros, and will be bred to Victor Ene. No horse in Jasper County is making more friends than the dude horse of Jasper country.

L. M. Kempel will take Manville and a son of his sons to Webb City to make a public season in 1902. Manville added a good trotter and a pacer in 1901. Manva Pierle will be remembered by those who saw her race last season.

Mr. Schermerhorn, that at one time owned Belle J., that W. F. Ervin won second money with in the M. & M. at Detroit, has been purchasing some good mares, among them Susan Jones, by Ashland Wilkes, dam Rioja by Egbert; second dam Miss Jones by Ashland Wilkes 70. She has a roan filly out of her by Integrity (2:25), brother to William and sire of Wilbur, the great wagon gelding that holds the world's record for five heats to wagon, winning the last three. Susan Jones is now in foal to the gray horse, Bridewell, by Manager.

Sweet Fortune is by Fortunatus out of the great broad mare, Alice M., dam of three by three different sires, two pacers and a trotter, with one in the 2:10 list; second dam Bay Dell, dam of Veritas (2:16½) and Vindes (2:29½). Mr. Schermerhorn will build a half-mile track on his farm north of Galena, Kas.

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coast of this continent, and those whose good fortune it has been to know him have seen a truly great horse, the greatest trotter that ever lived, by two standards, the fastest and the greatest.

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If you will take the trouble to go carefully over the summarized labor of the recent congress you will note with what unanimity the vital suggestions were in

favor of the millionaire campaigner. Take the distance rule advocated by some. It is a practical prohibition of the "average" horseman, who delights to take his small stable of one, two or three horses and go out and measure lances with his more favored neighbor. It is contrary to the best interests of sport, where the grand desideratum is to place each contestant in every event as nearly upon an equality as possible and keep hands off, hoping and wishing all the time that the best one may win. That is the honorable, many-sided side of the question. Per contra, we have all the manipulations and "dodges" known to the ingenuity of scheming scoundrels and abetted by the wealth of men who would like to appear better than their tools, to keep the deserving horse and man from getting their just dues.

The proposed "shortening of the distance" is in the interest of clean racing, while continuing the old three-in-five heat performance, is a mistake. It might do if we had all mile tracks and they were wide enough to "start" twenty to thirty horses abreast, but unfortunately we don't. Don't make all the difference, don't it? Well, I guess you! The utter absence of the proposition is apparent upon the face of it. The "close communication" rules will do on a pinch—for the "parlor" mile tracks, but when you take into consideration the thousand or more "cornfield" and "cowpath"—so-called tracks, well, that's up another street. Mr. Editor.

I know, and every intelligent horseman who has traveled through the great West for the last twenty-five years knows, of hundreds of tracks over which the millionaire horseman would not allow his horses to be exercised, far less raced. I know, and you know, and thousands of horsemen and their patrons know, of many tracks upon which it is impossible to "start" more than three horses abreast without absolute danger. Knowing this, these would-be leaders of the truly American sport of trotting and pacing get up in public places and in the public prints, unabashedly advocating shortening the distance. What a "travesty" upon justice! The only charitable conclusion is they "shove" don't know what they are talking about. How much "cold" would any of those rabid reformers care to "put up" on the "chances" of any named horse in the fifth or sixth row back from the "pole horse"? There's a question for your whiskers, and it's the argumentum ad hominem, too.

Almost, if not every "suggested" change at the recent congress "looks" on the face of it to be made in the interest of the millionaire owner, the "bookie" and the "billiard-table" mile track. Hence the necessity for a "new deal" or a new association, whose function it shall be to govern the minor meetings under a set of rules and regulations adapted to environmental conditions. It is self-evident to the casual observer that it is rank injustice to the latter to bind them by the laws made and intended to cover far different conditions. The patent fact which stares every one boldly in the face is the upbuilding and exploiting of the gambler by the "governing bodies" and the powerful associations, while pretending (?) to demand his dismissal from the scene of action. Short distance, anti-laying-up heat laws and id genus omnes are fol-de-rol. One simple law abolishing heat betting will stop the evil effectively.

I go on record right here that you can't raise enough money in ten years to tempt the "governing bodies" to enact such a law. Now, don't say anything more about the vice of "laying up" heats. Just please go away back and sit down—hard. There's a "lot more" could be said, but what's the use? There is necessarily bound to be a "split" sooner or later. Existing conditions are so at variance that it is utterly impossible to make one set of rules adaptable to all the cases.

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Editor RURAL WORLD:

That you have not got any good stallions in this section of Illinois, you had better pay us a visit. I will show you my stallion, Alroy, that for style and action is hard to beat. I also own a 4-year-old colt by Walnut Boy that is a good individual that I purchased from Mr. Hesley of Ionia, Mo. His dam, Blanche, is by Woodford Knox, second dam Monarch by Monitor Prince, third dam Lady of the Lake by Seth Warner. Monarch, I was told, was bred by the Colman Stock Farm of St. Louis, Mo. There is an increasing interest in the raising of good horses in this section of Illinois. C. W.

THE MONSEES SALE.

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Editor RURAL WORLD: Since I called at your office I have visited Kenyon, Indiana and Illinois and while on my trip bought four extra good jacks, two good registered Percheron stallions and one fine registered German coach stallion, and will include them all in our sale on March 4, a day easily to be remembered. We have the best lot of stock we have ever offered and hope to make an excellent sale. We call attention to our advertisement in the RURAL WORLD, and can assure readers if they will attend the sale they will have no cause to regret it.

L. M. MONSEES.

Give a stallion some kind of exercise the year round. Put him to the same kind of work intended for the progeny. If the colt is to be used for farm work keep the stallion in the field, if for trucking the devil around the stump and going clear around Robin Hood's barn when the front and back doors both stand wide open. To one who reads between the lines there is more "bumcombe" than real business in many of the proposed changes in the rules as they now stand. A few minor suggestions would be voted acceptable by the majority of horsemen interested, while those of major import only add to it already too heavy a load to be borne.

It looks very like change will have to be made sooner or later. The National and American Associations will have to merge their interests and take their millionaire clientele into the select upper circles of trotter and pacerdom, while the democratic masses evolve a new association to be named later on—which will guard and conserve the interests of the small fry owners, breeders, trainers and drivers. Don't mistake me that I advocate such distinctions and diversions. By no means! I only go on record that the trend of events, the consensus of opinion as voiced at the informal congress, unerringly points in that direction.

If you will take the trouble to go carefully over the summarized labor of the recent congress you will note with what unanimity the vital suggestions were in



A Disabled Man

is certainly not in it, and

Sprains and Bruises

dislike, but this is where

St. Jacobs Oil

comes in for a prompt, sure cure.

It Conquers Pain

Price, 25c. and 50c.

SOLD BY ALL DEALERS IN MEDICINE.

foot or two of snow so much the better. At any rate give them a big paddock where they can run about readily. Provide large box stalls before the colt comes and see that they are well disinfected with chloride of lime or some similar equally effective. See that the colt is well handled. Begin his education at birth. Get acquainted with him and see that he is halter broken within a few days old. I know, and you know, and thousands of horsemen and their patrons know, of many tracks upon which it is impossible to "start" more than three horses abreast without absolute danger. Knowing this, these would-be leaders of the truly American sport of trotting and pacing get up in public places and in the public prints, unabashedly advocating shortening the distance. What a "travesty" upon justice!

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There are two axioms of breeding

which have always seemed to the writer

(editorial in Trotter and Pacer)

and peculiarly pertinent. One is "Fashion follows speed," and the other "Breed to the winners."

Blood lines are valuable only as offering a probability of performance.

Home Circle

Written for the RURAL WORLD.
THE PASSING YEAR.

The still white moon crept down behind the hills.
And o'er the sky a mistlike vapor hung;
A trembling silence—like music thrills.
Was felt and heard, like music softly sung.

Thus slept the world, unheeding time or place;
Unheeding aught and life's brief hopes and fears.
The veil of night hid haggard human face,
As life kept measured step with passing years.

Then suddenly—from somewhere came a sound
Of ringing bells, a deep discordant clang.
That pulsed the throbbing air and beat the ground,
Until the frozen earth with echoes rang.

Some bells were tolling for the old year dead—
While some were joyful welcoming the new;
The midnight sky uplifted its proud head.
As the old year—with silent step passed through.

The dear old year—that we had loved so well—
Was gone; alas—to nevermore return.
We listened only to the tolling tomb,
The old was dear, the new we yet must learn.

Thus goes the old, so comes the eager new,
Time drags the generations to their doom.
The old are crowded until lost to view
Within the confines of a waiting tomb.—May Myrtle.

Written for the RURAL WORLD.
FROM THE SOUTH CAROLINA PINE WOODS.

I think wild flowers of some sort might be found here the year round in sheltered spots. The cultivated English violet comes out in January and February and blooms for months, making great, lovely clumps of sweet-scented flowers. The wild violet is one of the earliest of flowers, and is a reminder of home, until the common evergreen where here some of them are very large and almost a dark purple, others a pale blue with white markings.

And there are the variegated Johnny-jump-ups and delicate, snow-white beauties, so small and sweet that you smell them before you can find them. They so charmed me that I filled an old pan with the soil in which they grew and carefully transplanted some, hoping to coax them to grow and bloom in the yard, but they did not survive. They like moist, shady places, and grow thickest where there has been a fresh "burning"—that is where the fire has been run through the woods to clear out the underbrush.

The honeysuckle family is very large and has many representatives here; for weeks the woods are aglow with their pink and white blossoms and the air laden with their fragrance. This is the shrubby honeysuckle.

Very many of the wild flowers of spring have a rich, vanilla-like perfume, so different from the northern wild flowers which have little or no fragrance. I cannot now remember any but the wild phlox, though they all have a faint, sweet breath of spring.

I missed the early trilliums, or wake robins of our woods at home, as well as the deer little hepaticas and wood anemones that are so delicate in color and texture, yet withstand the rough spring winds so sturdy. I missed them in Missouri, too. I have never found a trillium, hepatica or anemone there, but was told one spring that a few hepaticas had been found in a secluded spot, miles away.

How well I knew the haunts of the wake robin, where I grew up! The wake robin came almost before the snow was gone; the hepaticas later, nestling at the roots of trees and stumps, mostly on the hillsides facing north. How we children loved and welcomed them!

The jessamine is at its best here and creeps and climbs everywhere, bearing golden globes of the colors by the roadside and along the fences with green and gold. The dogwoods are magnificent when in bloom; the flowers are so large and perfectly white, at their best, and cover the tree like a snowy mantle. The flowers keep a long time out, and I often thought how fine they would be to use for decorative purposes, though a little stiff. I kept every available dish and jar full of long branches of the white dogwood, pink honeysuckle and yellow jessamine. While they lasted our shack was in a state of glorification.

The trumpet creeper, which we prize so much at home grows wild here in great profusion, even to making a nuisance of itself in the cultivated fields, much as the wild morning glory does in Illinois; and in the thickets along the branches, the red honeysuckles clamber and riot in glowing luxuriance.

This is the cry of the soul when the waters are deep and the billows high, "My God, why hast Thou hid Thy face from us?" Is there no spot to rest on this beautiful earth where one can call it home, sweet home? Yet home is the dearest spot on earth, and to toll for it is a happiness, and no sacrifice too great. Why, oh, why is the way hedged up and the thorns so sharp that the way cannot be opened? Where true love exists and separation is a trial, it takes courage and bravery to endure it. Why are honesty and integrity at a discount, when we read they are so hard to find? Why is there no rift in the clouds? Is the darkness to last always? Where there is no foothold and hope dies a lingering death will God punish if the weary one gives up the battle?

"Every heart knoweth its own sorrow." As we pass people on the street who are laughing and seem to have no care or sorrow we wonder why hearts must be burdened many I did not see.

"Boy" is almost as enthusiastic as I am over flowers, and never went anywhere I did not count them, and I know there were many I did not see.

As we pass people on the street who are laughing and seem to have no care or sorrow we wonder why hearts must be burdened many I did not see.

In a Glass of Water.

Put a handful of glazed coffee in a glass of water, wash off the coating, look at it; smell it! Is it fit to drink? Give LION COFFEE the same test. It leaves the water bright and clear, because it's just pure coffee.

The sealed package insures uniform quality and freshness.

LION COFFEE

the same test. It leaves the water bright and clear, because it's just pure coffee.

The sealed package insures uniform quality and freshness.

where on an errand without bringing me something new.

I must not forget the blue ageratum, such masses of it! You know red spider takes in the house, and it seldom does well in the flower bed. Here it makes perfect blue blottches in September and October; and such long, full, frilly plumes of golden red to go with it, I never before saw.

July and August the orchid family come to the front; they prefer the moist, grassy, open hollows; in such spots they show something new every day. They are mostly tuberous rooted with long, or lanceolate leaves and flower spikes. One of them, the yellow-fringed orchid, gray calls our handsomest species, and it is one of the most beautiful of flowers. I wonder it is not catalogued by florists; it is far more worthy than many they use, but perhaps it does not take kindly to "taming."

There are many flowering shrubs, mostly white, and of many forms, from the large white cup of the sweet bay to the pendant fringe of the old man's beard. I found the mourning bride among the wild flowers, or one of her near relatives. There are several kinds of pitcher plants, one of them holds a purple velvety umbrella over the pitch.

Down in the grass on the higher land hide a miniature plant, a small rosette of thick leaves, the rosette not larger than a dime or quarter, covered with soft silvery hairs. From the center it sends a stem an inch or so in height which holds up to the dewy heavens a single, small white cup. It is very curious and interesting.

Have you ever petted and pampered a grape myrtle, coaxing it to bloom? I have. We had one for several years in the greenhouse, and two small, reluctant flowers are all it ever gave us. Imagine my surprise to see it growing as large and thrifty as a lilac, or snowball, the spreading top a sheet of pink, in blossom today. It sometimes grows twelve or fifteen feet in height. There is much grape myrtle growing along the beach that they call it "Myrtle" beach.

There are few wild roses—but Oh! the cultivated ones! Our old pets and favorites—Mermet, and La France, and Perle and all the rest! I went to see a rose garden, the property and pride of one of the daughters of the family, and while I was there the whole family had come to feel at home in it, and all escorted me through it to enjoy my exclamations of delight. The young owner was not at home when I was there, but her mother told me that three years ago the ground was bare where the garden now is, and those of whose bushes had stems (I almost said trunks) as thick as my wrist, and must have been a yard or more across the tops, and loaded with blossoms. Think of having your arms filled with long stemmed tea roses of every color and degree of sweetness as I did; for they were very generous, and cut freely and gave liberally.

I saw the Wichurana rose there for the first time. They had it trained up to a support about twelve feet high, and three or four wide, and it was covered with a compact screen of shining green leaves, dotted with white single blossoms as large as a small tea saucer. It was a beautiful object. Its companion, a crimson rose, on name and substance, I think, though the whole family had come to feel at home in it, and all escorted me through it to enjoy my exclamations of delight. The young owner was not at home when I was there, but her mother told me that three years ago the ground was bare where the garden now is, and those of whose bushes had stems (I almost said trunks) as thick as my wrist, and must have been a yard or more across the tops, and loaded with blossoms. Think of having your arms filled with long stemmed tea roses of every color and degree of sweetness as I did; for they were very generous, and cut freely and gave liberally.

I have ridden the Judith range with my brothers, helped brand cattle, held the herd while they branded and I rode a good cow horses as were on the range anywhere and that could dodge as quick as a cow. I have never been thrown and never do I hold to the bucking strap, only when on a bucking horse.

I say to all who ride as I ride to take the good cowgirl saddle for both health and comfort, instead of the astride or cross saddle. The former may do in a city or for a ten or fifteen mile ride, but for me a good and strong cowgirl bronco won't buck it off. One has more confidence in herself on such a saddle. As to the cross saddle, I would not have one as it is no good for the far West.

Our Buff Plymouth Rocks are putting the White Rocks in the shade again this winter, so far as eggs are concerned. I am more pleased than ever with them. With eggs at 25¢ to 30¢ per dozen, it makes quite a difference whether the birds lay the most during May and June and the Buffs want to sit them; but for winter layers the Buffs are in the lead with us.

We have furnished straw for the poultry to scratch in, and they seem happy and contented and are filling the egg basket. We are not as well fixed as Mr. Geer, but we have our house lined with tarpaper and the cracks all battened, and the hens get along very well. A few got their combs frosted during December, when the thermometer went to 23 degrees below zero.

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We will soon begin to save eggs to fill the Sure Hatch incubator, as we have the finest stock we ever owned and expect some fine chicks. Some of our neighbors think us very "hen cranky" for paying \$5 for breeding stock, but we have found by experience it doesn't pay to breed from "any old thing." Like begets like in the chicken world as well as anywhere.

Adair Co., Mo. MRS. J. E. MAY.

DON'T LET THE SONG GO OUT OF YOUR LIFE.

Don't let the song go out of your life; though it change sometimes to flow in a minor strain, it will blend again.

With the major tone, you know. What though shadows rise to obscure life's skies.

And hide for a time the sun; They sooner will lift, and reveal the rift; If you let the melody run.

Don't let the song go out of you life; Though your voice may have lost its trill.

Though the tremulous note should die in your throat,

Let it sing in your spirit still. There is never a pain that hides not some gain.

I cannot tell to the beauty, varlets and profusion of wild flowers, though I invite all to come and see for yourselves, when we get moved.

In a May, your button suggestion, is an improvement on the ribbon. I vote for it, and want one when they materialize.

WIFE OF SORGHUMITE.

Written for the RURAL WORLD.

WHY?

This is the cry of the soul when the waters are deep and the billows high, "My God, why hast Thou hid Thy face from us?" Is there no spot to rest on this beautiful earth where one can call it home, sweet home?

Yet home is the dearest spot on earth, and to toll for it is a happiness, and no sacrifice too great. Why, oh, why is the way hedged up and the thorns so sharp that the way cannot be opened?

Where true love exists and separation is a trial, it takes courage and bravery to endure it. Why are honesty and integrity at a discount, when we read they are so hard to find? Why is there no rift in the clouds? Is the darkness to last always? Where there is no foothold and hope dies a lingering death will God punish if the weary one gives up the battle?

"Every heart knoweth its own sorrow."

As we pass people on the street who are laughing and seem to have no care or sorrow we wonder why hearts must be burdened many I did not see.

"Boy" is almost as enthusiastic as I am over flowers, and never went anywhere I did not count them, and I know there were many I did not see.

As we pass people on the street who are laughing and seem to have no care or sorrow we wonder why hearts must be burdened many I did not see.

There are several kinds of iris, a small early variety, the blue blossoms blotched with yellow; a large pale blue, and a larger bright yellow that grows in the water, or very close to it. The Paris daisy, or marguerite is one of the wild flowers, and much larger than any I have grown in the greenhouse, except the plant from California.

All through the summer new flowers are blooming. I tried to keep count of them, and got to number 114, but I did not go about much, and lost several weeks of bloom from sickness, and I know there were many I did not see.

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The trumpet creeper, which we prize so much at home grows wild here in great profusion, even to making a nuisance of itself in the cultivated fields, much as the wild morning glory does in Illinois; and in the thickets along the branches, the red honeysuckles clamber and riot in glowing luxuriance.

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feed. Free circular how to plant, cultivate, etc.,
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cled. Great and individual merit combined. R. L. OGBURN, Carmi, White Co., Ill.

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breeders of Ideal Tecumseh, Black
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and Chief Perfection.

A. (incl. 66,000)
Also some sows at Black
State Fair, 1901.

Perfection, 15,000 A. Some will be bred to ideal
Tecumseh or Chief Perfection. Jr. Two
sons of old Garland and others, calved spring 1901.

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Hogs. Top individuals. No screen-
ings crated. Write for let-live prices.

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satisfaction guaranteed or money returned at my
expense. S. C. WAGENER, Pass., Ill.

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**E. P. SKENE,
Land Commissioner,
Central Station, Park Row, Room 500,
CHICAGO, ILL.**

The Pig Pen

PASTURING MATURE RYE

Editor RURAL WORLD: Does rye, when ripe, make a good and safe feed for hogs? Is it safe to turn the hogs into a ripe field of rye? If so, would the hogs make a good gain in general growth and fat?

ENQUIRER.

Scott Co., Mo.

Unquestionably, rye is a good and safe food for hogs, and by turning hogs into the field after the grain has matured they will harvest the crop economically and with good effect. If necessary, the hogs can be pastured on the rye in the early spring, and if not too many, until the heads form, when it will be necessary to remove them from the field until the grain is matured; otherwise they will break down too many of the stalks while green and soft, thus causing waste. Of course, in shelling out the grain, more or less, will be scattered on the ground and be trampled into the soil. This, when weather conditions favor, will germinate and afford late summer and fall pasture. Hogs can be utilized for hog pasture with advantage to a greater extent than it is.

COAL, ASHES AND SALT FOR HOGS.

Editor RURAL WORLD: On the pig pen of Jan. 22 issue, H. C. J. says that he considers a former statement of mine misleading to inexperienced feeders. Now, Brother H. C. J., if you want affidavits as to the truth of that statement you can have them signed by that neighbor, his son-in-law, my oldest son and myself, and they will include the fact that the same thing as to wormy hogs has been noted at least three years in succession. Five years ago I saw several hogs in our county seat buried. A large farmer near the town hauled several loads of the ashes, charcoal, etc., to his hog field. Within a week he had lost 30 head of hogs. No others in the neighborhood died, and when he removed the well hogs from the "stuff" no more died.

The "disgusting" subject of hog cholera has been discussed so long and to such good effect in Missouri that the state is almost free from the disease, but I think it would be difficult to get any qualified veterinarian to say that feeding salt and ashes with soft coal ever prevented or cured a case of it.

I have owned and fed hogs 20 years and never lost one by disease. I feed less than half the salt I did 20 years ago, and my stock is all healthy and in good condition. If there have been any experiments made to show that salt and ashes have an effect on the welfare or growth of animals, I am not aware of it. Whenever my family physician advises me to take a dose of salt, ashes, charcoal or soft coal once a day, and to give the same to the rest of my family, to prevent or cure typhoid fever, then I may take it feeding it to my hogs.

With the information I have on the subject, I would just as soon think of doing one as the other, or of preventing my children from taking measles by hanging a bag of asafoetida and sulphur around their necks. C. D. LYON.

Southern Ohio.

FROM SUNNYSIDE STOCK FARM.

Editor RURAL WORLD: We wish to report our hogs in good shape and growing nicely, and the demand has been better than last season. The 10 head of hogs we have entered in the Feb. 14 Berkshire sale at Kansas City are all good ones, and we think are safe in pig to Lord Lee, one of the test sons of Lord Premer 5000. There are three Duchen sows that are grand good ones, out of a daughter of Baron Lee 4th, and four Salle Lee out of Salle Lee 2d, which is dam of the sweepstakes herd at the Omaha Exposition, also first, second and third prize yearling sows and sweepstakes sow any age bred by exhibitor. Salle Lee 3d is also the dam of the highest priced gilt in our sale at Kansas City last February. These gilts are all sired by Victor Baron 5610, a boar bred by us and sold to Thos. Teal & Son of Utica, Iowa, to head their herd of prize-winning sows. He was one of the best yearling boars we saw last season.

Anyone looking for a good boar should not overlook Baron Beauty 4570 that has stood at the head of the Sunnyside herd for the past three years. We never used a boar that bred more uniformly. The gilts all have good heads, backs and hams and good feet and legs. The sows that were sold by us last February at Kansas City were all of his get, except a few, and they were admired for their uniformity, style and finish. We are not selling him for any fault of his; it is because we have kept him so long we can't use him to advantage in our herd longer. Salle's Baron is a tanner and should head some good herd. He is long, low and level, with a good head, back and hams. Send for a catalog and look at his breeding. It can't be beaten.

HARRIS & McMAHAN.

La Mine, Mo.

CULLING THE PIGS IN WINTER.

In the winter on the farm one of the preparations for winter should be culling the live stock so as to get rid of everything that is not reasonably sure to be worth as much more in the spring as the cost of keeping it through the winter will amount to. No one should waste feed or labor during the winter on stock that will not repay the winter's keep, says the N. Y. Farmer.

In reducing stock, it should be done with discretion, and one of the animals the farmer should keep is the good brood sow that produces large litters of good pigs and is able to raise them. Predictions as to the future prices are always vague, but there is every reasonable certainty that hogs will bring a good price for another year or two at least.

One should make an effort to provide keeping the hog lot of the future full of good stock, and there is no more important element in doing this than that of preserving the sows that have proven prolific breeders and good mothers. Often one is obliged to sell and even sacrifice stock.

The latter often happens when feed is short, as is the case this year, but try to avoid sacrificing the good brood sow, she may be a little old, but if she has shown no signs of failure in the breeding pen or as a nurse and caretaker of her litter, she is a good piece of property to keep.

Mr. Alexander Speirs, Box 36, West-Brook, Maine, who advertises a cure for rupture, is one of the aldermen of his city, and of its ten largest taxpayers. He receives much praise from his patrons.

A SWINE SHOW IN PROSPECT.

Swine men are in favor of a swine show and sale at Kansas City this fall in connection with the cattle show.

Missouri and Kansas swine breeders are enthusiastic over the proposition. The breeders in attendance at Meissner Axline and Synder's sale met at a call from H. M. Kirkpatrick, the chairman appointed by Mr. F. M. Lall was elected chairman and Mr. F. D. Winn secretary.

The question of the show and sale was informally but earnestly discussed. The E. E. Axline and H. C. Synder combination Poland China brood sow sale came off as advertised at Oak Grove, Mo., on Wednesday, Jan. 22. The offering was made up of stock of good breeding and in good condition. Four animals in Mr. Axline's consignment sold for \$100 or over, the top being \$114. His head brought \$11,50, averaging \$28.97. Mr. Synder's top figure was \$50; 19 head brought \$47, averaging \$2.47.

ERNST FREIGAU,
Secy., Dayton, Ohio.

THE AXLINE-SYNDOR-NULL SALES.

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G. W. Null's sale was held at Odessa, Mo., on Thursday, Jan. 23. His offering was mostly young animals and not in the flesh that would command the highest prices. His top figure was \$25 for a boar, Unique Model, and \$175 for a sow. Fifty-one head brought \$1,625, an average of \$32.30.

The water should always be in reach, also good clean water. When the salt is out they drink less and their appetites are less sharp.

Give all the variety of roughness possible. Mine have feeder, clover hay and barley straw. For grain only corn, as it is the best of all grains to fatten a lamb. I feed grain first in the morning, and give them a couple of hours at least to clean it up before I feed fodder. At noon I give a little fresh hay, corn again at 3 o'clock p. m. and hay last thing at night. The barley straw is put in covered racks in the lots, and they have access to it at all times. My sheds and lots are on a platform 6 inches high, wide enough for them to get their fore feet on them when they come to drink. A fattening lamb likes to get his feet up on something and it just suits to get them drink this way. It will take 90 to 120 days to fatten a lamb after once on full feed; it depends on the condition of the lamb when started and the size desired to reach when selling.

The watchword should always be cleanliness and quiet about the lots. The same person—as far as possible—should always do the feeding, and when once in a lot and used to it they should remain there till they go out to market. I think it is a mistake to change lots as recommended by some.

SHELTER FOR SHEEP.

A subscriber to the Stockman and Farmer wishes information as to the value of self-feeders, etc. A few years ago I used a self-feeder to fatten a lot of old ewes. It answered the purpose very well, but I could not tell whether it was better than regular feeding, as I had no way of making a comparison. Four years ago I commenced winter lamb feeding with the expectation of making it regularly a part of the winter farm work, writes John M. Jamison in the "Stockman and Farmer." Like the subscriber, I wanted definite information on nearly all points. As but few are fed in this section, I found it hard to get information.

Neither could I get much in some directions by reading. My aim was to strike the best plan as soon as possible. The self-feeder came up for consideration, but I could get no facts as compared with regular feeding. What I mean by this statement is that none had made a comparison of the two by tests, using two lots of lambs, and measuring feed and weighing the lambs. I turned then to the books to find out what I could.

Experiments have been made at one or two stations, with the conclusion that it is a very expensive way to feed. The western feeders use them in feeding large flocks, where one man can attend to thousands. As the evidence was against the system I adopted regular feeding and it well.

I am sure I can get the feed to them fresher than I could by using a self-feeder. The lamb likes everything clean.

The first winter I shelled the corn and then gave it up as a useless waste of labor, and also for the reason that ear corn prevents some of the flock from getting more than their share as is often the case when shell corn is put out to them.

It takes about 30 days' careful work to get up to full feed on corn or other grain. The troughs should be made so that the lambs cannot get their feet or droppings into them. I sometimes scrub mine out to freshen them. Besides the troughs I use my hay and fodder racks to feed grain in. In the two feed lots, that each contain 140 lambs, I have about twice as much as shed room. I feed corn twice a day, between 6 and 7 o'clock a.m. and at 3 p. m., and I try to feed so that no corn will be found in the troughs at feeding time. Changes in the weather affect their appetites very much, sometimes amounting to one-fifth less corn eaten, and they will give the sign of a change many hours before it comes. It requires a great deal of care to meet the demands of their appetites.

4. A fourth lot of four weanling pigs kept in a small pen and fed a grain ration of one-fifth cottonseed meal and four-fifths corn meal for four weeks on the mixture and one week on pure corn meal, for 128 days and all were well fattened at the end of this time.

3. A third lot of weanling pigs was kept in a small pen and fed a grain ration consisting of one-third corn meal and two-thirds wheat middlings, for 128 days and all were well fattened at the end of this time.

4. A fourth lot of four weanling pigs fed corn meal for 84 days and kept in a small pen, made very poor gains and a change of feed was necessary to fatten them. In the 84 days they made an average daily gain per pig of one-half pound, and for each pound of gain they ate 1.5 pounds, and for each pound of grain they ate 3.7 pounds of grain and had a value of 2.37 cents.

5. In this experiment, when weanling pigs were kept in small pens and fed a grain ration containing one-fifth cottonseed meal and four-fifths corn meal, one-fourth to one-half of the number died after being fed the ration five to seven weeks; those living and fed the above ration, continuously and alternating with corn meal, were fattened with most excellent results.

The amount of grain required to produce a pound of gain was practically the same with pigs getting cottonseed meal as it was with pigs getting middlings, but was

